



Grenoble INP - UGA is a member of **international** engineering and management education and research **networks**. It is widely recognized in national and international rankings.



**8** schools + **38** laboratories

**8 350** students

**1 300** teaching, research, administrative and technical staff

**Grenoble INP-UGA is a renowned public institution of higher education and research, and a major player in the Grenoble ecosystem. It is the engineering and management institute of Grenoble Alpes University, and plays a leading role in the scientific and industrial community.**

## Associate Professor

<b>Research profile field</b>	Distributed, Parallel or embedded systems, Networks, Software Engineering, IS
<b>Requested job profile</b>	Associate Professor
<b>Ministerial reference for the position</b>	27 PR 0546
<b>CNU Section</b>	27
<b>Job location</b>	Grenoble and Saint Martin d'Hères campus (PHELMA – LIG)
<b>Hiring date</b>	01/09/2024 (DD/MM/YY)
<b>keywords</b>	Modeling, Programming, Optimization, Devops, Autonomic Computing

Grenoble INP - UGA is a leading public institution accredited with the French label "Initiative d'excellence". It offers innovative engineering and management programs, with an increasing internationalization of its course offers. The courses are grounded in sound scientific knowledge and linked to digital, industrial, organizational, environmental and energy transitions. The Engineering and Management Institute of Grenoble Alpes brings together more than 1300 staff members (teacher-researchers, lecturers, administrative and technical staff) and 8 350 students, located on 8 sites (Grenoble INP - Ense3, Grenoble INP - Ensimag, Grenoble INP - Esisar, Grenoble INP - Génie industriel GI, Grenoble INP - Pagora, Grenoble INP - Phelma, Polytech Grenoble, Grenoble IAE and the INP Prepa). Grenoble INP is also a highly-ranked institution of higher education and research, leading the way in the fields of engineering and management on an international scale. It is a member of a large number of international academic and research networks. It is part of the European University UNITE!.

As part of Grenoble Alpes University, Grenoble INP has associated guardianship of 38 national and international research laboratories and of technological platforms. The research conducted there benefits both its socio-economic partners and its students. Grenoble INP is at the heart of the following scientific fields: physics, energy, mechanics and materials; digital; micronanoelectronics, embedded systems; industry of the future, production systems, environment; management and business sciences.

Grenoble INP - UGA is an equal opportunity employer committed to sustainability. Grenoble INP-UGA celebrates diversity and equity and is committed to creating an inclusive environment for all employees. All qualified applications will be considered without discrimination of any kind.

# Teaching

**School:** Grenoble INP - Phelma

**School website:** <https://phelma.grenoble-inp.fr/>

**Contact:** [alice.caplier@grenoble-inp.fr](mailto:alice.caplier@grenoble-inp.fr)

## **School presentation:**

Grenoble INP Phelma is an engineering school of the Grenoble Polytechnic Institute. It offers students a wide choice of courses at the cutting edge of scientific and technological progress: micro & nanotechnologies, instrumentation, energy, innovative materials, information technologies, biomedical engineering, process engineering and the environment. It welcomes more than 1,400 students in 11 engineering courses, including one apprenticeship, and a dozen masters courses. The teaching staff is made up of around one hundred full professors and over 300 part-time lecturers. The administrative and technical staff numbers around fifty. The school has two sites: the Minatec site in Grenoble and the university campus in Saint-Martin d'Hères. While reaffirming its three main pillars of physics, electronics and materials, Phelma is ensuring that the training of its engineering students and masters students evolves in line with changes in careers, linked primarily to the energy transition and the digital transition.

## **Teaching Profile:**

The digital transition that has been taking place over the last few years confirms the need for all future engineers to have a solid grounding in IT, whatever their speciality. Our graduates have long been recognised for this.

This training is based on the conceptual aspects of computer science, programming know-how and the development of software for current practical applications. The range of skills taught covers both aspects close to the machine (system and network programming, C language, assembler, etc.) and aspects closer to the user (algorithms, object programming, databases, artificial intelligence, software engineering, etc.). It takes full account of the essential current dimensions of sustainable development, sobriety and the preservation of available resources.

The selected candidate will have a solid background in computer science, giving him or her a good overview of the field. Priority will be given to teaching in the areas of algorithms, imperative and object-oriented programming and data structures. Skills in system/parallel programming and software engineering will be highly valued. The teaching approach will need to be adapted to a diverse audience, some of whom may not be IT specialists, with a focus on the school's themes. The levels of teaching concerned will be either the first year of school or in the courses most affected by this discipline: Embedded Systems and Connected Objects (SEOC), Signal Images Communication Multimedia (SICOM, joint course with Ense3), Integrated Electronic Systems (SEI) and the Microelectronics and Telecommunications (MT) apprenticeship course.

Particular attention should be paid to training students in engineering in the context of the ecological transition, which means that associate professor should, if not have skills in this field, at least have an interest in it, so as to develop current teaching to take account of the constraints associated with this transition.

# Research

**Host laboratory:** LIG

**Teams:** CORSE, DATAMOVE, ERODS (KRAKOS), POLARIS, DRAKKAR, VASCO, SPADES, Ctrl-A, SIGMA

**Laboratory website:** [www.liglab.fr](http://www.liglab.fr)

**Contact:** [noel.depalma@imag.fr](mailto:noel.depalma@imag.fr)

## **Research Profile:**

Parallel, distributed and embedded systems and associated networks are becoming increasingly complex. The construction, management and optimisation of this basic software raise major challenges linked to their design, optimisation and evolution. Tackling these challenges therefore requires us to revisit these systems, networks,

services and applications, and their design, programming and control models, in order to provide robust, scalable, high-performance and scalable services more simply.

The scientific profile and research project of the candidates must be in line with at least one of the following themes:

- Distributed, parallel or embedded systems
- Networking
- Software engineering, Information systems

The selected candidate will work in one of the following LIG teams: CORSE, DATAMOVE, ERODS (KRAKOS), POLARIS, DRAKKAR, VASCO, SPADES, Ctrl-A, SIGMA. He or she must have a high-level research activity and be able to develop international collaborations.

The research activity presented in the application must be proven, in particular by international publications.

## Specific requirements

The ability to teach in English is imperative but the majority of teaching will be in french, as a number of the school's courses are given strictly in English. International experience would also be an asset.

Administrative activities:

From the first year, the selected candidate will be involved in the administrative management of the SEOC (Embedded Systems and Connected Objects) programme.

Special features of the post:

Teaching may take place at either of the school's two sites: Grenoble (Polygone scientifique) and Saint Martin-d'Hères (campus est).

## How to apply

Applicants must submit their applications on the Galaxie Platform of the French Ministry of Higher Education and Research from the 22nd of February 2024, 10 a.m. (Paris time zone) to the 29th of March 2024, 4 p.m. (Paris time zone), deadline.

Any document sent outside the Galaxie procedure will not be taken into account.

The interview will include simulation/situational exercises.

The details will be communicated when the invitation is sent out. In addition, part of the interview may be carried out in English.